

**BY ORDER OF THE COMMANDER
NIAGARA FALLS AIR RESERVE
STATION**

914 AIRLIFT WING INSTRUCTION 21-109

9 JUNE 2015



Maintenance

**CRASHED, DAMAGED, OR DISABLED
AIRCRAFT RECOVERY (CDDAR)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance* and extends the guidance of Air Force Instruction (AFI) 21-101, Air Force Reserve Command (AFRC) Supplement 1, *Aircraft and Equipment Maintenance Management*, and Niagara Falls Air Reserve Station (NFARS) Comprehensive Emergency Management Plan 10-2. This instruction establishes individual responsibilities, restrictions and documentation requirements for responsibilities and procedures necessary for Crashed, Damaged, or Disabled Aircraft Recovery (CDDAR) in the NFARS area of responsibility (AOR) to include all unit equipped and transient aircraft. Squadron commanders and maintenance supervisors are responsible for executing the group's CDDAR program in accordance with (IAW) this instruction. All agencies involved with recovery operations will ensure compliance with this instruction to ensure a cooperative, coordinated response to CDDAR situations. Maintenance Group supervisors will monitor the CDDAR program and assist squadrons as necessary. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force (AF) Information Management Tool (IMT) Form 847, *Recommendation for Change for Publication*; and route to 914 MXG/MXQ. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records* and disposed of IAW the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS).

SUMMARY OF CHANGES

This publication has been revised and has been renamed from a Niagara Falls Air Reserve Station Instruction (NFARSI) to a 914 AWI as a result of the disassociation between the 914th Airlift Wing and 107th Airlift Wing. Paragraphs 2.5.3, 2.7 and 4.3 have changes and should be reviewed prior to use.

1. General: The CDDAR Team must be prepared to rapidly deploy crash recovery equipment and personnel as deemed necessary by Headquarters, Air Force Reserve Command (HQ AFRC/A4MY). Primary considerations of the CDDAR team are to open the runway for operational use, to prevent secondary damage to disabled/incident aircraft and to preserve evidence for accident/mishap investigation IAW NFARS Comprehensive Emergency Management Plan 10-2, AFI 91-202, *The US Air Force Mishap Prevention Program* and AFI 91-204, *Safety Investigations and Reports*.

2. Procedures and Responsibilities:

2.1. The Incident Commander (IC) as determined by the NFARS Comprehensive Emergency Management Plan 10-2 is the person in charge at the incident until all emergency response actions are completed. Transfer of command to recovery organizations to include the CDDAR Team Chief takes place when hazard mitigation is complete. The Emergency Operations Center (EOC) under the EOC Director develops a recovery plan, which is approved by the Installation Commander before it is implemented. The EOC Director assures expedient, cooperative responses to CDDAR situations by MXG, personnel, fire protection and other essential agencies.

2.1.1. All base organizations involved in crash recovery must be familiar with NFARS Comprehensive Emergency Management Plan 10-2. The responsibilities of each essential base organization for CDDAR response are as follows:

2.2. Maintenance Operations Center (MOC).

2.2.1. The MOC will immediately establish and maintain communications to act as the Aircraft Maintenance focal point for receipt and transfer of all in-flight or ground emergency information within the NFARS and surrounding area. In addition, MOC shall contact all applicable agencies to respond as expeditiously as possible. Notification will include type of aircraft, location, amount of fuel and/or explosives on board, and known extent of aircraft damage. Direct all personnel to stay clear of the recovery site unless assistance requested by the incident commander.

2.2.2. The MOC will maintain a copy of the recovery team personnel contact listing. Listing will be provided by CDDAR team chief semi-annually. When notified of a crashed, damaged or disabled aircraft, the MOC will initiate checklist MOC-E005, aircraft mishap/accident checklist.

2.3. Production Superintendent. The Production Superintendent will:

2.3.1. Initiate impoundment procedures when directed IAW 914th Maintenance Group Instruction (MXGI) 21-106, *Aircraft Impoundment*.

2.3.2. Direct ground movement of home station or transient aircraft that the EOC directs to be moved to facilitate CDDAR operations.

2.3.3. Assist the CDDAR team chief as needed during recovery operations.

2.3.4. Ensure a tow team is available to the CDDAR team for any assistance necessary to aid in the recovery operation. When directed will contact Logistics Readiness Squadron, Fuels Management Flight (LGSF) through the EOC, to impound any fuel trucks used during ground refueling operations with a mishap aircraft at home station.

2.4. CDDAR Team Chief. The CDDAR Team Chief will:

2.4.1. Identify team members and specific positions (located in CDDAR Team Chief Continuity Binder, Tab A, located in the Aero Repair TO cabinet). Team members must be at least a 5-level with the exception of the team chief who must be a 7-level. Ensure initial training is provided and conduct recovery training exercises on an annual basis to maintain proficiency. Document all training in the Maintenance Information System (MIS) and Training Business Area (TBA) and serve as the certifying official for all CDDAR tasks.

2.4.2. Maintain an up-to-date point of contact listing for all team members. List will include contact numbers during duty and non-duty hours. CDDAR team listing will also identify CDDAR team positions, Air Force Specialty Code (AFSC), and any special qualifications. The listing will be updated semi-annually and a current copy will be provided to the MOC. The CDDAR team chiefs contact information will be listed on the base emergency recall and mobilization rosters for contact after normal duty hours.

2.4.3. Establish and maintain CDDAR capability and procedures. Direct and coordinate CDDAR operations as instructed by the EOC through the EOC director. The EOC will contact the CDDAR Team Chief when the incident area is safe for recovery operations to begin. Review and start checklists located in Tab F of Team Chief Continuity Binder. Evaluate aircraft damage and prepare for recovery operations.

2.4.4. Conduct an annual briefing with all the agencies involved in the CDDAR process. This briefing will outline everyone's responsibilities for their respective area. A tabletop exercise will also be conducted in order to check validity of telephone numbers, exercise checklists, as well as personnel capabilities. There will also be a discussion on possible responses to a variety of different scenarios.

2.4.5. Ensure the CDDAR equipment is maintained and prepared to respond, and prepared to rapidly deploy crash recovery equipment and personnel for aircraft as directed by HQ AFRC/LGRC in order to perform recovery operations.

2.4.6. Direct and coordinate CDDAR operations as instructed by the IC or EOC. The IC or EOC will contact the CDDAR Team Chief when incident area is safe for recovery operations to begin. Review and start the Crashed, Damaged, or Disabled Aircraft Recovery Team Chief Checklist. Evaluate the aircraft damage and prepare for recovery operations.

2.4.7. Ensure complete safety briefings are given daily, detailing hazards to personnel and equipment. Maintain continuous communications with MXG/CC and MOC to keep them informed of recovery operation status, to include CDDAR team limitations. Document the locally devised CDDAR daily occurrence log to maintain a record of the incident.

2.5. Other Base Agencies:

2.5.1. 914th Civil Engineering Fire, Emergency Services will: Assume IC duties at Fire, hazardous material (HAZMAT) and weapons of mass destruction (WMD) on base accident/incident sites per NFARS Comprehensive Emergency Management Plan 10-2 and AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*. The IC is the only point of contact (POC) at the accident/incident site. When the area is safe and secured, the IC responsibilities will be turned over to the CDDAR Team Chief. Fire, Emergency Services responsibilities are outlined in the NFARS Comprehensive Emergency Management Plan 10-2.

2.5.2. 914th Security Forces Squadron (SFS) will: Report and coordinate with the IC to implement responsibilities as outlined in the NFARS Comprehensive Emergency Management Plan 10-2, to control the vicinity of the mishap site.

2.5.3. Civil Engineering Environmental (CEV) and Base Bio-Environmental Engineering (BEE) will advise the EOC and IC of HAZMAT handling procedures. The HAZMAT response team will mitigate release of HAZMAT materials (NOTE: The HAZMAT Response Team is a function of the fire department (CEF) and CEV. They will ensure all hazardous materials, plans and procedures are managed in accordance with the NFARS HAZMAT Emergency Planning and Response Plan.

2.5.4. The base BEE will advise the EOC Director and IC on the type(s) of personal protective equipment (PPE) required to perform recovery of an aircraft containing composite/hazardous materials from a comprehensive listing of PPE reviewed and certified biennially for CDDAR operations. In consultation with the CDDAR team chief, they will provide annual briefings to the CDDAR of their responsibilities, duties, appropriate PPE usage and types that may be required to eliminate possible health hazards. BEE will be available during crash recovery operations to provide exposure monitoring of personnel involved in CDDAR and clean-up operations; to include respirator fit testing, heavy metal testing or other necessary evaluations.

2.5.5. The 914th Safety office in coordination with 107th Safety office will: Advise EOC Director of safety hazards and concerns to ensure safe aircraft recovery operations. Provide CDDAR Team Chiefs with assistance and guidance in obtaining resources as needed to rectify unsafe conditions. Preserve and document evidence IAW 914 AW or NFARS Mishap Response Plan. In consultation with 914 AW/CC and applicable memorandum of understanding (MOU) coordinate for the assembly of the interim safety board (ISB). Transfer responsibility for mishap investigation to the ISB when appointed and on- scene. After first responders have recovered survivors and rendered the mishap site safe the ISB or safety investigation board (SIB) president will notify CDDAR team chiefs when he/she releases the site for further cleanup and recovery. Advise the IC and EOC Director of safety hazards and concerns to ensure safe aircraft recovery operations; provide CDDAR team chiefs with assistance and guidance in obtaining resources as needed to rectify unsafe conditions.

2.6. The 914th Vehicle Operations section (LGTM) will stand by to provide heavy equipment as directed by the EOC. In the event of an off-base accident/incident, Vehicle Management may be requested through the EOC to provide transport of the CDDAR team and equipment to the site.

2.7. The Base Fuels Office will stand by to provide de-fueling vehicle(s) as directed by the IC; if the crashed/damaged aircraft is deemed fuel related, fuel and oil sampling will be handled IAW technical order (TO) 42B-1-1, *Quality Control of Fuels and Lubricants*, Paragraph 5.7.

2.8. The Munitions Section will coordinate with the EOC to coordinate EOD support from regional EOD team concerning collection and disposal of all explosive ordinances per NFARS Comprehensive Emergency Management Plan 10-2. Contact Electronic Counter Measure section (MXS/MXMVE) to assist with flare/chaff handling.

3. Transient Aircraft Responsibilities:

3.1. CDDAR equipment on station is limited to assigned home station airframe. 914 MXG/CC will ensure additional special equipment and unique requirements for transient aircraft is obtained from applicable sources as required.

3.2. CDDAR team chief will contact owning organization to obtain necessary expertise and guidance from appropriate sources. All team members will be briefed on special requirements/health and safety concerns associated with transient aircraft recovery.

3.3. All base organizations will provide assistance with transient aircraft (including civilian aircraft) recovery operations as directed.

4. Safety Considerations:

4.1. All base organizations must be aware of any safety concerns present during crash recovery procedures.

4.2. All organizations **MUST** communicate and coordinate activities through the EOC during recovery operations.

4.3. **Note:** Risk Management (RM) practices will be utilized and are paramount in all decision making.

4.4. Prior to any recovery actions ensure any hazards, including toxic materials, munitions and radioactive materials are eliminated, and the aircraft and egress/ejection systems are made safe for recovery activities and investigation team members. All base organizations should be familiar with safety/health hazards associated with any unique characteristics/hazards/materials for assigned aircraft (e.g. F-16 EPU hydrazine, C-130 ballast depleted uranium, aircraft composite materials, etc.) and document training.

4.5. Incidents involving aircraft made up of a composite structure may cause serious injury or death to those in contact with it. Transient aircraft home bases and BEE must be contacted to determine composite material risks and requirements for PPE.

4.6. The crash site will only be disturbed to the extent necessary to eliminate a situation that is detrimental to the aircraft, support equipment or personnel. The area will be maintained in an undisturbed state until the aircraft is released to maintenance by the Incident Commander. Once recovery actions begin, only personnel designated by the CDDAR team supervisor will enter the recovery area.

4.7. Always obtain necessary clearance for maintenance vehicles to cross active runways or taxiways to reach the recovery site if required.

STEVEN B. PARKER, Colonel, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, 24 Jan 07

AFPD 21-1, *Air and Space Maintenance*, 25 Feb 03

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 21 May 2015

AFMAN 33-363, *Management of Records*, 1 Mar 08

AFI 91-202, *The US Air Force Mishap Prevention Program*, 5 August 11

AFI 91-204, *Safety Investigations and Reports*, 12 Feb 14

NFARS Comprehensive Emergency Management Plan 10-2, 1 Jun 08

TO 42B-1-1, *Quality Control of Fuels and Lubricant*, 1 Aug 14

914 MXGI 21-106, *Aircraft Impoundment*, 17 May 13

Adopted Forms

AF 847, *Recommendation for Change of Publication*, 22 Sep 2009

Abbreviations and Acronyms

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFMAN—Air Force Manual

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Specialty Code

AOR—Area of Responsibility

BEE—Base Bio-Environmental Engineering

CDDAR—Crash Damaged/ Disabled Aircraft Recovery

CEF—Fire Department

CEV—Civil Engineering Environmental

EM—Emergency Management

EOC—Emergency Operations Center

IAW—In Accordance With

IC—Incident Commander

IMT—Information Management Tool

ISB—Interim Safety Board
HAZMAT—Hazardous Material
NFARS—Niagara Falls Air Reserve Station
MIS—Maintenance Information System
MOC—Maintenance Operations Center
MOU—Memorandum of Understanding
MXGI—Maintenance Group Instruction
OPR—Office of Primary Responsibility
ORM—Operational Risk Management
POC—Point of Contact
PPE—Personal Protective Equipment
RDS—Records Disposition Schedule
RM—Risk Management
SIB—Safety Investigation Board
SFS—Security Forces Squadron
TBA—Training Business Area
TO—Technical Order
WMD—Weapons of Mass Destruction

Attachment 2

CDDAR TEAM CHIEF DAILY CHECKLIST

Table A2.1. CDDAR TEAM CHIEF DAILY CHECKLIST.

CDDAR Team Chief Daily Checklist		
Daily Shift Briefings		
	Date/Initial	
Daily shift check in/briefing with IC.		
Daily shift check in/briefing with Bio/Environmental.		
Daily shift check in/briefing with Fire Chief.		
Daily shift check in/briefing with Safety.		
Perform daily briefing with CDDAR team.		
Daily Team Chief Crash Site Shift Survey		
	Date/Initial	Observations
Check for/report obvious visual hazards.		
Check for/report leaking/puddle fluids.		
Check for/report signs of smoke/fire.		
Check for/report inhibiting weather conditions.		
Check for/report signs of hazardous wild life in recovery area.		
Daily Team Chief Crash Site Equipment Shift Survey		
	Date/Initial	Yes / No / N/A
Is CDDAR recovery equipment accounted for, daily/shift inventories signed?		
Is there, or have preparations been made to set rest work schedules?		
Do individuals have adequate PPE to perform recovery operations?		
Is there, or have preparations been made to provide toilets, sanitation, rest/break area?		
Is there, or have preparations been made to provide adequate food/water?		
Is there, or have preparations been made to provide heat, air conditioning and shelter from weather?		
Is there, or have preparations been made to provide medical assistance, eye wash station, fire extinguishers, first aid kit, etc.?		